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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,562	04/20/2001	Troy Wilford	8932-268	1273

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EXAMINER

KOKABI, AZADEH

ART UNIT PAPER NUMBER

3751

DATE MAILED: 11/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/839,562

Applicant(s)

WILFORD, TROY

Examiner

Azy Kokabi

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7-15,17-20 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,16 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7-11,17-20 and 24 is/are rejected.
- 7) ☐ Claim(s) 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Information Disclosure Statement

2. The information disclosure statement in Paper No. 9 contains a duplicate reference as the information disclosure statement in Paper No. 4. The Grotz reference (U.S. Patent No. 5,968,078) was considered. Duplicate information disclosure statements referring to the same reference is not necessary.

Inventorship

3. In view of the papers filed 4/20/01, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by addition of inventor Cory W. Carter.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of the file jacket and PTO PALM data to reflect the inventorship as corrected.

Election/Restrictions

4. Applicant's election of claims 1-20, and 24 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Art Unit: 3751

5. Claims 2, 4, 6, 16, and 21-23 are withdrawn from further consideration by the examiner, 37 CFR 1,142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1,3, 5, 11, 17, 20, and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al (U.S. Patent No. 5,152,790).

In regard to **claim 1**, Rosenberg et al discloses a ligament reconstruction graft anchor apparatus with an implant body (figure 2, #22) having a first and second end (figure 2, #36 and 34). The first end (figure 2, #36) has an opening configured to receive an insertion tool (see figure 3, #60) while the second end (figure 2, #34) has a recess.

Further, Rosenberg discloses a graft interface member (figure 2, #20) having a graft holding portion (figure 2, #50) and an implant coupling portion (figure 2, #48) in which a portion of the coupling member is configured to adapted into the recess of second hole to permit the implant body to rotate independently of the graft interface member (column 5, lines 46-49). Further, the graft holding portion has a central longitudinal axis (figure 3, #4) that is adapted to hold a graft aligned with the central longitudinal axis as shown in figure 6.

In reference to **claim 3**, Rosenberg discloses a cage graft holding portion (see figure 2, #20).

In regard to **claim 5**, Rosenberg discloses a cage with a cage bottom below the hole (see figure 3, #50) and a cage top above the holes. The section in between the holes interconnects the top and the bottom cage portions. The cage portions are attached together through the section between the holes (see figure 3).

In reference to **claim 11**, Rosenberg discloses an implant body that is integrally connected to the graft interface member (see figure 2).

In regard to **claim 17**, figure 2 discloses a hexagonal opening in the first end of the implant body (also see abstract).

In reference to **claim 20**, Rosenberg discloses an implant body containing external threads (figure 2, #30).

In regard to **claim 24**, the normal operation of the Rosenberg device anticipates the method recited in claim 24.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. **Claims 7-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg in view of Hitomi et al (U.S. Patent No. 5,643, 267).

As previously discussed in paragraph 7 above, Rosenberg further discloses all the limitations as set forth supra. Rosenberg discloses a snap connection between the implant body and the graft interface member, however the annular flange is shown on the implant body and not on the coupling portion of the device.

Rosenberg does not disclose an implant coupling portion with a flexible post, slotted flared tip portion or an undercut section in the second opening of the implant body. Further, Rosenberg fails to disclose an implant body with internal thread portion.

Hitomi et al discloses a bone connector that is adapted to join cut bone ends. Hitomi discloses the connection means that is utilized in claims 7-10 to connect bone ends. Specifically, Hitomi discloses an implant coupling portion with a flexible post (figure 3a, #709) that has a flared tip portion (figure 3, #709). The flared tip portion is slotted (see figure 3). Further, Hitomi discloses an undercut section in the recess of the bone connector (figure 2A #511).

It would have been obvious to one of ordinary skill in the art to modify the snap fixation device of Rosenberg with the snap connection means in Hitomi in order to provide a more secure means to connect the implant body and the graft interface member. The attachment means of Hitomi provides a "snugly fitted" connection in the groove, which remains "elastically deformed" (see column 4, lines 25-26 and 30).

11. **Claims 18 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg in view of Chauvin et al (U.S. Patent No. 6,129,763).

As previously discussed in paragraph 7 and 10, Rosenberg does not disclose an internally threaded implant body.

Chauvin discloses an expandable osteosynthesis cage, which includes an internally threaded implant body. The internal threads were employed to secure the spacer into the implant body (compare figure 1 and 2).

It would have been obvious to one of ordinary skill in the art to have modified the device in Rosenberg with the internally threaded implant body of Chauvin in order to facilitate a secure connection between the implant body and the graft interface member. Coupling the graft member with the implant body through the use of internal threads provides an efficient means to connect and disconnect the two devices as would have been obvious to one of ordinary skill in the art.

Allowable Subject Matter

12. Claims 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references cited disclose various features, which are similar to those, disclosed by applicant.

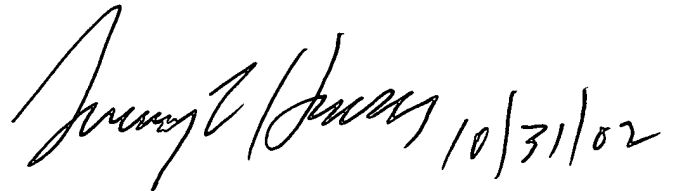
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azy Kokabi whose telephone number is (703) 306-4154. The examiner can normally be reached on Monday- Friday, 8:00am to 5:00pm.

Art Unit: 3751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (703) 308-2580. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3588 for regular communications and (703) 305-3588 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

AK
October 31, 2002

A handwritten signature in cursive script, followed by the date "10/31/02".

GREGORY L. HUSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700